(19) World Intellectual Property **Organization** International Bureau





(43) International Publication Date 19 May 2005 (19.05.2005)

PCT

(10) International Publication Number WO 2005/044304 A3

- (51) International Patent Classification7: A61P 35/02 // C07K 16/28
- A61K 39/395,
- (21) International Application Number:

PCT/US2004/036954

(22) International Filing Date:

4 November 2004 (04.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/517,337	4 November 2003 (04.11.2003)	US
60/525,579	26 November 2003 (26.11.2003)	US
60/565,710	27 April 2004 (27.04.2004)	US
60/611,794	21 September 2004 (21.09.2004)	US

- (71) Applicant (for all designated States except US): CHI-RON CORPORATION [US/US]; 4560 Horton Street, Emeryville, CA 94608-2916 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LONG, Li [CA/US]; Chiron Corporation, P.O. Box 8097, Emeryville, CA 94662-8097 (US). LUQMAN, Mohammad [US/US]; Chiron Corporation, P.O. Box 8097, Emeryville, CA 94662-8097 (US). YABANNAVAR, Asha [US/US]; Chiron Corporation, P.O. Box 8097, Emeryville, CA 94662-8097 (US). ZAROR, Isabel [US/US]; Chiron Corporation, P.O. Box 8097, Emeryville, CA 94662-8097 (US). AUKERMAN, Lea [US/US]; Chiron Corporation, P.O. Box 8097, Emeryville, CA 94662-8097 (US).

- (74) Agent: ALEXANDER, Lisa, E.; Chiron Corporation, Intellectual Property Department, P.O. Box 8097, Emeryville, CA 94662-8097 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 25 August 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: USE OF ANTAGONIST ANTI-CD40 ANTIBODIES FOR TREATMENT OF CHRONIC LYMPHOCYTIC **LEUKEMIA**

(57) Abstract: Methods of therapy for treating a subject for chronic lymphocytic leukemia are provided. The methods comprise administering a therapeutically effective amount of an antagonist anti-CD40 antibody or antigen-binding fragment thereof to a patient in need thereof. The antagonist anti-CD40 antibody or antigen-binding fragment thereof is free of significant agonist activity, but exhibits antagonist activity when the antibody binds a CD40 antigen on a human CD40-expressing cell. Antagonist activity of the anti-CD40 antibody or antigen-binding fragment thereof beneficially inhibits proliferation and/or differentiation of human CD40expressing chronic lymphocytic leukemia cells.

